

NDIA SO/LIC Symposium

A Special MOUT Presentation

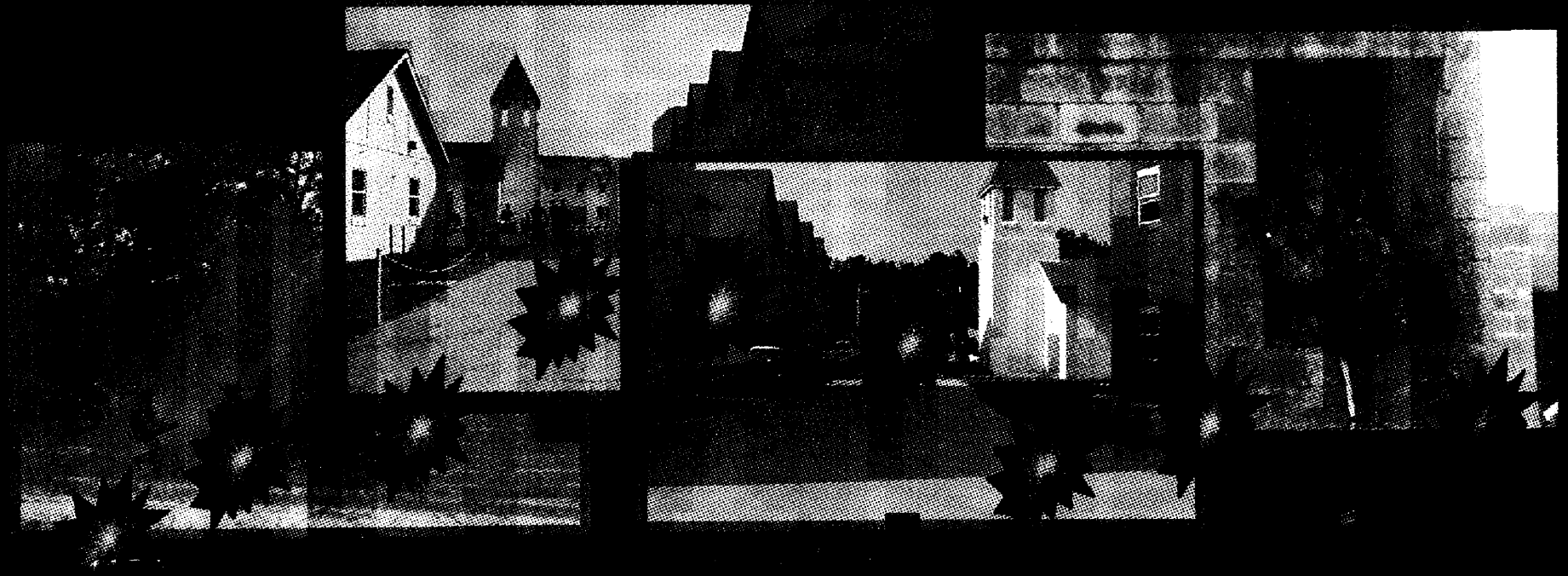
17 February 1999

Crystal City Hyatt Hotel

OERLIKON CONTRAVES

Defense

Military Operations On Urban Terrain





1963 - The
11th Air Assault used
McKenna Range as a
training site in the
development of Air
Mobile concepts.

1981 - A small village
was erected as one of
three Army designs of
the European theater.



McKenna's History

**1996 - DBBL acquired
McKenna in support of
DOD MOUT ACTD.**

Tango 7

**430
Acres**

26,000 ft of Fiber Optics

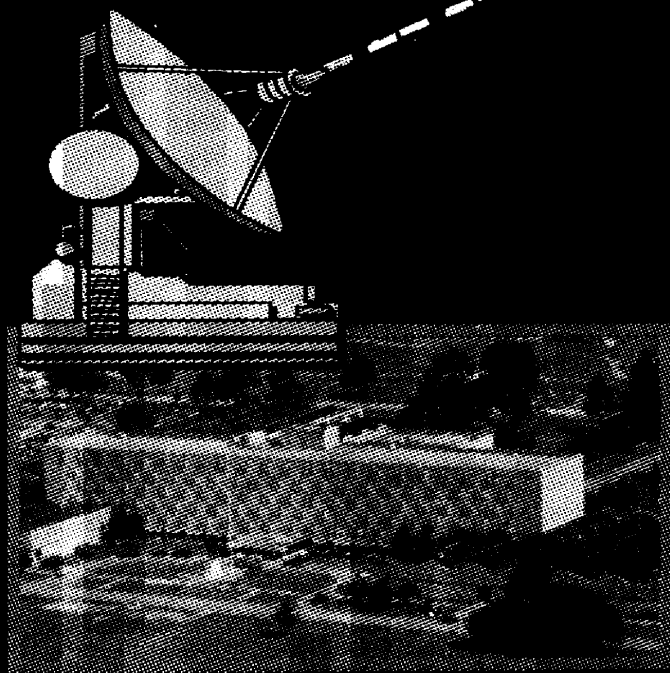
42,000 Man-hours

**\$4.5 Mil
Instrumentation**



Today

McKenna has evolved into a training and experimentation test and instrumentation complex that supports the warfighter during advanced combat training in an urban environment.



MOUT ACTD



The MOUT facility is connected to the Defense Simulations Network and USAIS classrooms for worldwide simulations and training exercises.



Mickenna Benefits

- **Advanced Technological Test Bed**
 - Force XXI Land Warrior
 - Target Engagement
 - Small Unit Operations
 - Integrated Combat Identification Dismounted Soldier
 - Robotics
 - Mini-UAVs
- **Training Facility, Enhanced (Level 5)**
 - Troop Maneuver Area (All Terrain)
 - Integrated Tracking and Surveillance Systems
 - Simulations to Support Virtual and Constructive Environment
 - Distance Learning Worldwide
 - Multimedia and CDROM Development Site



Facilities

- On-site Lodging
- 5,000 ft Runway and Heliport
- 430 Acre Maneuver Area
- 29 Urban Structures
- Tunnel System
- Preplanning and After Action Review Facility
- Observer Controllers



Functional Elements

- Battle Site and Troop Movement Area



- Control Center



- Operations

Capabilities

- **Data Collection and Storage**
- **Multi-Track Digital Video Recorders**
- **128 x 64 Video Switcher**
- **3D Computer Modeling**
- **2D Mapping and Analysis Workstation**
- **Video Conferencing and High Speed Transmission Equipment**



**Airfield Control
Tower**

**Future
low
income
Residences**

**UN
Checkpoint**

**2 Story
(Comm.)**

**2 Story
(Comm.)**

**2 Story
(Comm.)**

**1 Story
(Res.)**

**2 Story
(Comm.)**

**2 Story
(Town Hall)**

**1 Story
(Jail)**

**1 Story
(Admin)**

**Tunnel
Extension**

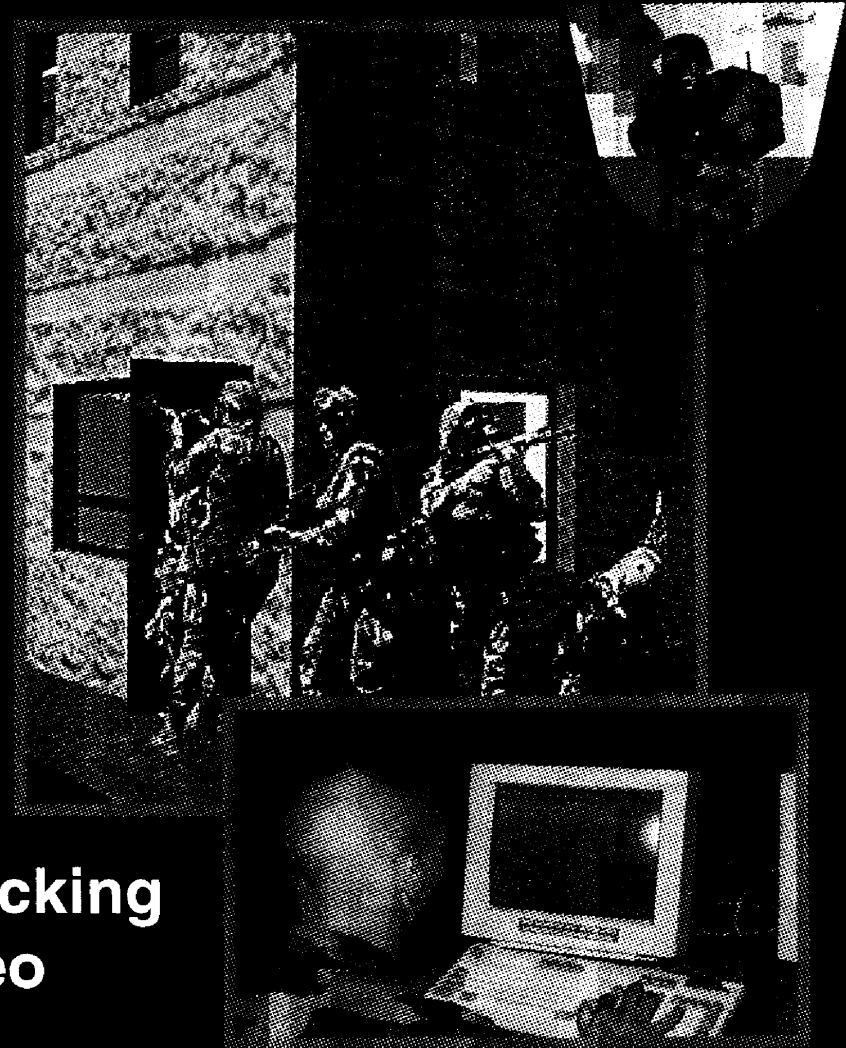
Parking

Tunnel System

Instrumentation

- I-CIDDS Instrumentation
 - Indoor
 - Outdoor
- Video (Complete Coverage)
 - Indoor
 - Outdoor
 - Day and Night
 - Remotely Controlled
- Audio
 - Two Way
- Virtual Simulations
 - 3D
 - 2D, Soldier ID, Shot Tracking
- Industry Standard Digital Video
- Synchronized Playback

MOUT ACTD



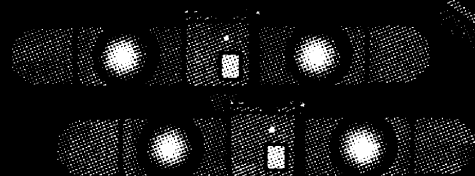
I-CIDDS Components

Soldier Components

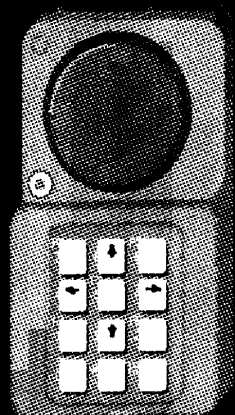
Helmet Unit



Arm Detector



Master Control Box



Umpire Unit for Guiding the Exercise and Data Collection

Smart Laser



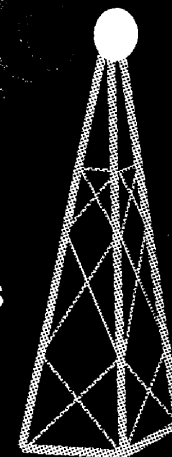
Sensors



Indoor

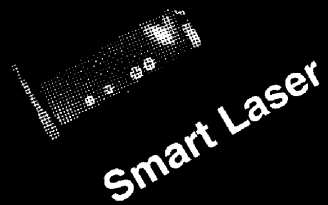


Outdoor Miles Compatible GPS



I - CIDDS Capability for Combat

- All Weather Day and Night IFF Capability
- Proven System Performance Through Obscuration, Vegetation
- Interrogation and Response Up to 5 km Range
- Works in Dust, Smoke, Fog Within Soldier Visual / Weapon Range
- Sealed and Hardened to Withstand Specified Environments
- Proven Combat Mode Operation Through Extensive Exercises and Field Tests
- I-CIDDS to Be Part of Combat Unit's Mission Essential Task List (METL)



I - CIDDS Provides Combat ID Through the "Bushes"

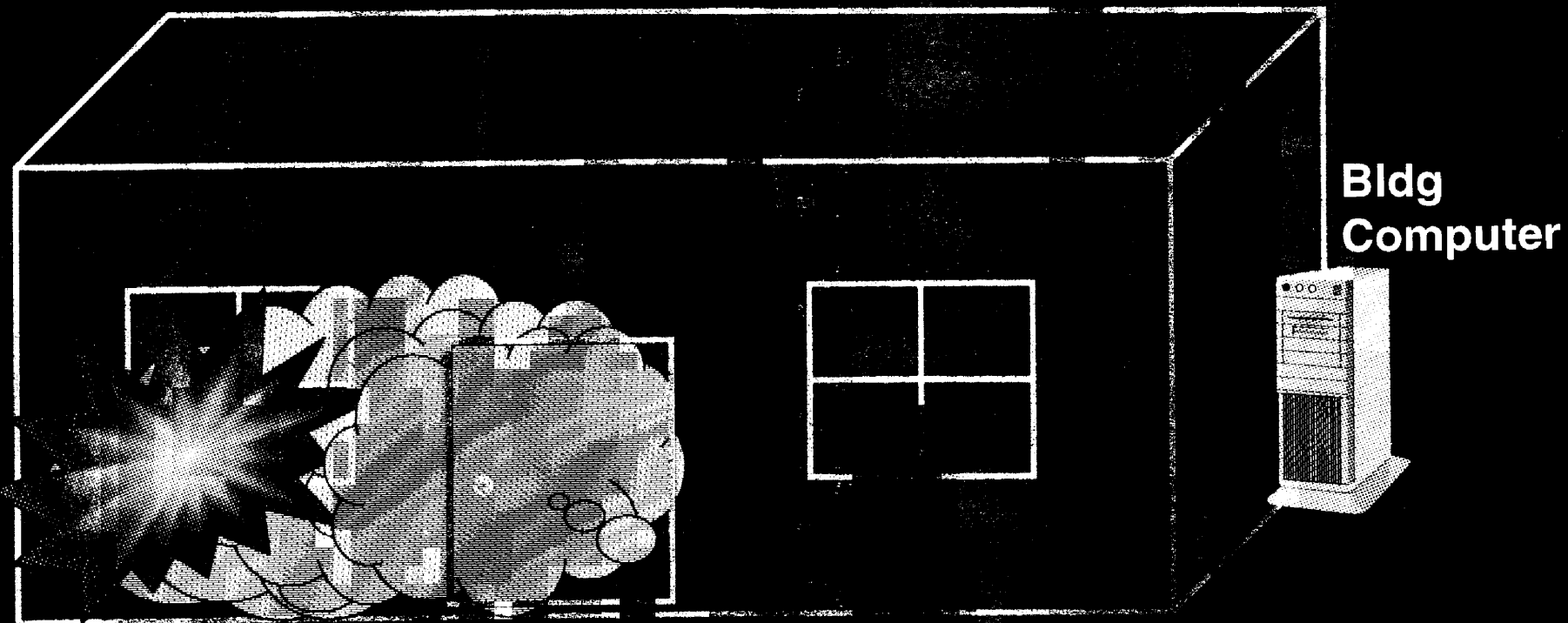
Building Sensor System



- Position Location and Data Sensors



Special Effects

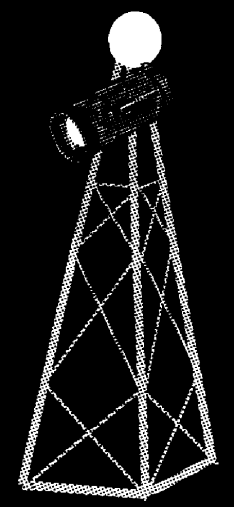
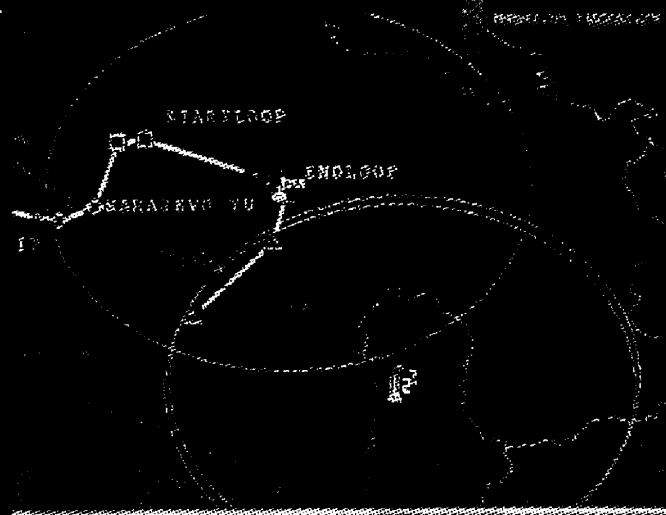


•Smoke and Simunitions

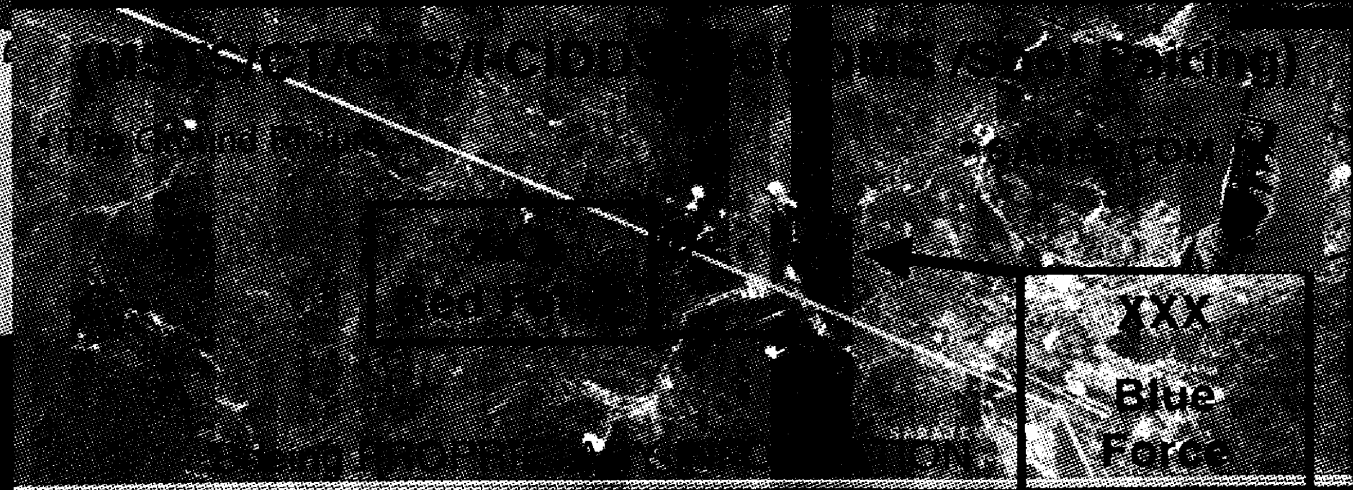


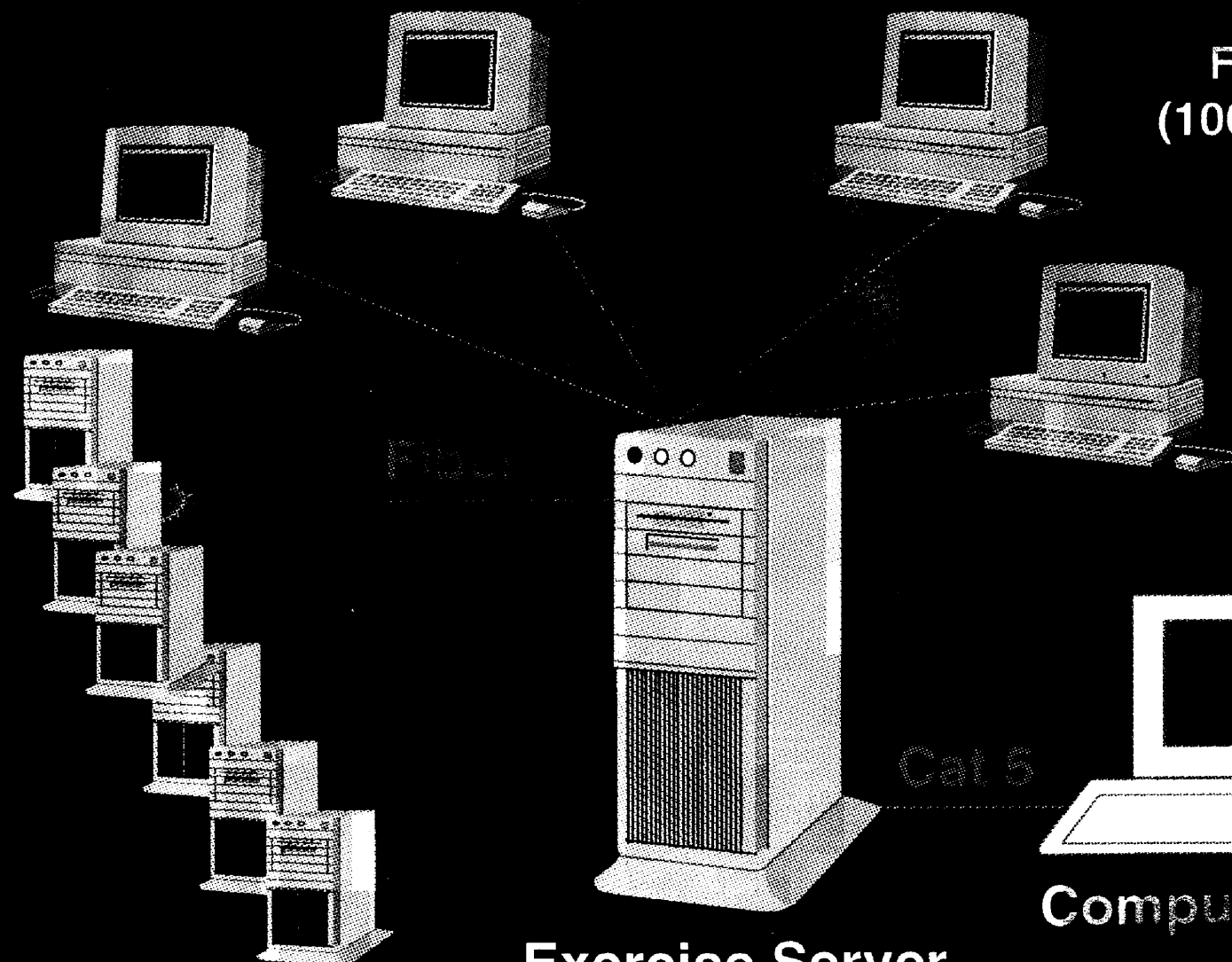
Outside Tracking

Camera



Tower





**Fast Ethernet
(100Mbps) Network
Fiber Optic**

Digital Recorders

Exercise Server

Computer Graphics

